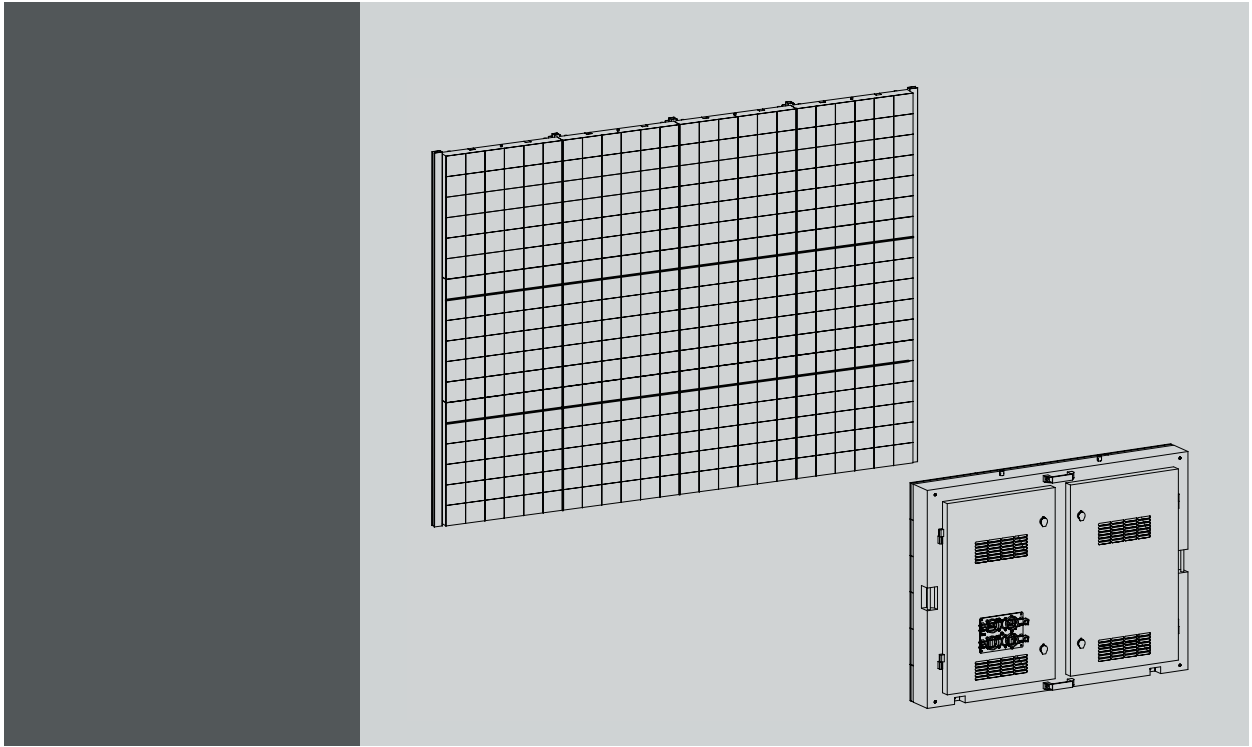


SF-10V display



Installation manual

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Printed in China

Changes

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1. SAFETY

About this chapter

Read this chapter attentively. It contains important information to prevent personal injury while installing the SF-10V display. Furthermore, it includes several cautions to prevent damage to the SF-10V tile. Ensure that you understand and follow all safety guidelines, safety instructions and warnings mentioned in this chapter before installing the SF-10V display. After this chapter, additional “warnings” and “cautions” are given depending on the installation procedure. Read and follow these “warnings” and “cautions” as well.

Overview

- Safety guidelines
- Important safety instructions
- Important warnings

1.1 Safety guidelines

Personal protection



WARNING: Ensure you understand and follow all the safety guidelines, safety instructions, warnings and cautions mentioned in this manual.



WARNING: Be aware of suspended loads.



WARNING: Wear a hard hat to reduce the risk of personal injury.



WARNING: Be careful while working with heavy loads.



WARNING: Mind your fingers while working with heavy loads.

Installation personnel

This installation must be performed by authorized and qualified technical personnel only.

Accredited safety officers must ensure the safety of the site, construction, assembly, connection, use, dismantling, transport etc. of such safety critical systems.

Caution

Installation should be performed only after you are thoroughly familiar with all of the proper safety checks and installation instructions. To do otherwise increases the risk of hazards and injury to the user.

Assembly parts are designed for intended use only in conjunction with SF-10V LED displays.

Do not modify and/or replicate any component. Barco uses specific materials and manufacturing processes in order to achieve part strength. Consult Barco for assistance with custom applications.

Always follow Barco installation instructions. Contact Barco if you should have any question regarding the safety of an application.

The manufacturer assumes no liability for incorrect, inadequate, irresponsible or unsafe assembly of systems.

Product care

Structural & mounting components should be kept dry, clean, lubricated (only if recommended), coated properly, and otherwise maintained in a manner consistent with part design. Barco products must be used in a manner consistent with their design and inspected on a routine basis for security, wear, deformation, corrosion and any other circumstances that may affect the load handling capability of the part.

Barco recommends inspections at regular intervals for all installations and increasing in frequency for more critical installations. If a part is found to have damage, which may cause a decrease in load capability, the part must be removed for service or replaced immediately.

Under no circumstances are Barco parts repairable by anyone other than Barco.

1.2 Important safety instructions

Instructions:

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Clean only with materials or chemicals that are inert, nonabrasive, noncorrosive and non-marking. Consult the manufacturer for further advice should any doubts exist regarding any cleaning procedure.
- Do not block ventilation openings. Install in accordance with the manufacturers instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding type plugs/sockets. If the provided sockets/plugs are damaged then replacement of the defective parts must be undertaken immediately.
- Protect the power/data cords from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. Replace damaged power/data cords immediately.
- Only use attachments/accessories specified by the manufacturer.
- Disconnect the power to this apparatus during lightning storms or provide suitable additional lightning protection. Unplug this apparatus when unused for long period of time.
- Refer all servicing to qualified service technicians/personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, the apparatus does not operate normally, or has been dropped.
- Use only with systems or peripherals specified by the manufacturer, or sold with the apparatus. Use caution during lifting/moving or transporting to avoid damage by possible tipping.

1.3 Important warnings

Important warnings:

Risk of electric shock:

Do not open. To reduce the risk of electric shock, do not remove cover (or back). Remove all power and data cabling before opening the device for service purposes. No user-serviceable parts inside. Refer servicing to qualified service personnel.

Maximum and minimum ambient temperature:

The maximum ambient temperature for the LED wall is 45°C, the minimum temperature is -20°C.

High leakage current:

The combination of multiple tiles in an installation results in increased levels of leakage current. In order to avoid risk of electric shock due to high leakage current, proper grounding of the installation is required.

Flammable materials:

Keep flammable materials away from the installation (such as curtains). A lot of energy is transferred into heat. The installation should be such that the amount of air flow required for safe operation of the equipment is not compromised. Proper ventilation must be provided.

Risk of electric shock / Risk of fire:

To protect against risk of fire caused by overloading of power cables, MAXIMUM 2 tiles may be connected in parallel. Each power source cable supplying maximum 2 tiles should be protected by a circuit breaker or fuses rated 16 A / 250 VAC (15 A / 250 VAC in the USA and Canada). Note that one SF-10V tile requires 220-240 VAC, 50-60 Hz, 1.56 amps at 230 VAC.

Disconnect device:

When the appliance inlets of the individual tiles are not accessible, the socket outlets supplying the rack shall be installed near the equipment and be easily accessible, or a readily accessible general disconnect device shall be incorporated in the fixed wiring.

This equipment MUST be earthed:

In order to protect against risk of electric shock, the installation should be properly grounded. Defeating the purpose of the grounding type plug will expose you to the risk of electric shock.

Power system:

It is recommended to use a TN-S power distribution system (a power distribution system with a separate neutral and grounding conductor) in order to avoid large ground current loops due to voltage differences in the neutral conductor. The total electrical installation should be protected by an appropriately rated disconnect switch, circuit breakers, over voltage protector and Ground Fault Current Interrupters. The installation shall be done according to the local electrical installation codes. In Europe special attention should be given to HD 60364, Harmonization Document for electrical installation of buildings. In Germany VDE 0100 should be adhered to. In America, special attention should be given to the National Electrical Code, ANSI/NFPA 70.

Mains cords:

The power cords delivered with this system have special properties for safety. They are not user serviceable. If the power cords are damaged, replace them only with new ones. Never try to repair a power cord.

Salty environment

If install in coastal cities, the SF-10V display shall be installed 250 meters away from the shoreline horizontally in dry and cold climates; 500 meters away from the shoreline in case of high humidity and hot climates. The high humidity and hot climate mean the climate that the humidity is higher than 80% RH and temperature is higher than 0°C for one third of time every

2. SF-10V TILES

About this chapter

This chapter described the SF-10V, modular outdoor LED tile.

Overview

- SF-10V tile
- Stacking SF-10V packages

2.1 SF-10V tile

Tile overview

The front and back view of the SF-10V tile.

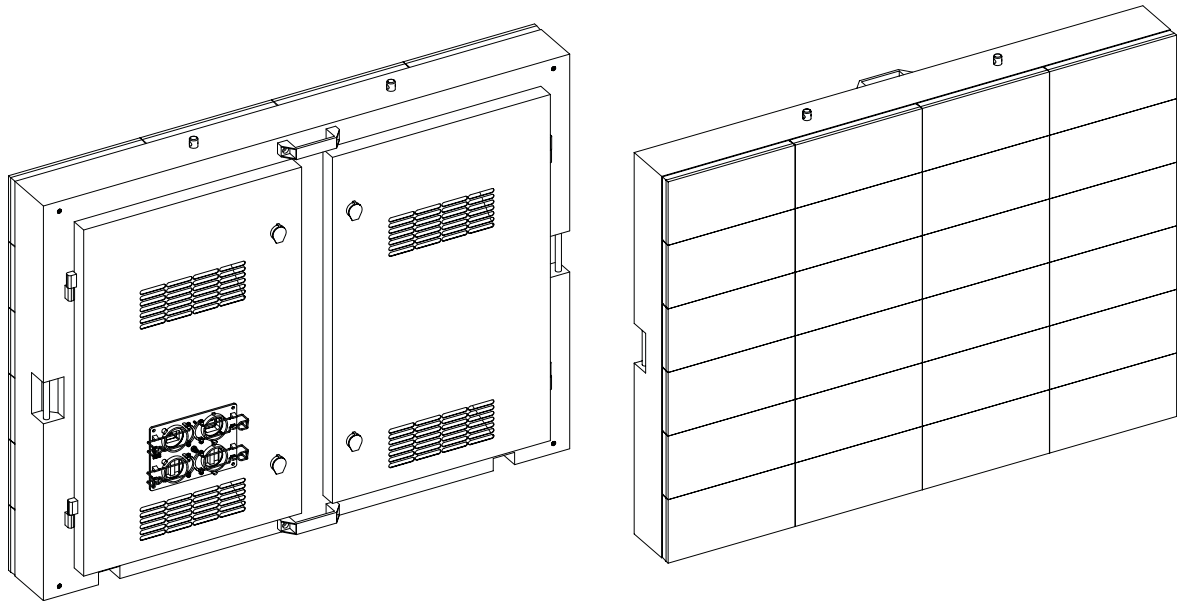


Image 2-1

Packing

For safe transportation, the SF-10V tiles are stored in a secure way. every tile have its separate package, Maxium 4 SF-10V packages that inner hold the tile can stand in a big wooden pallet.

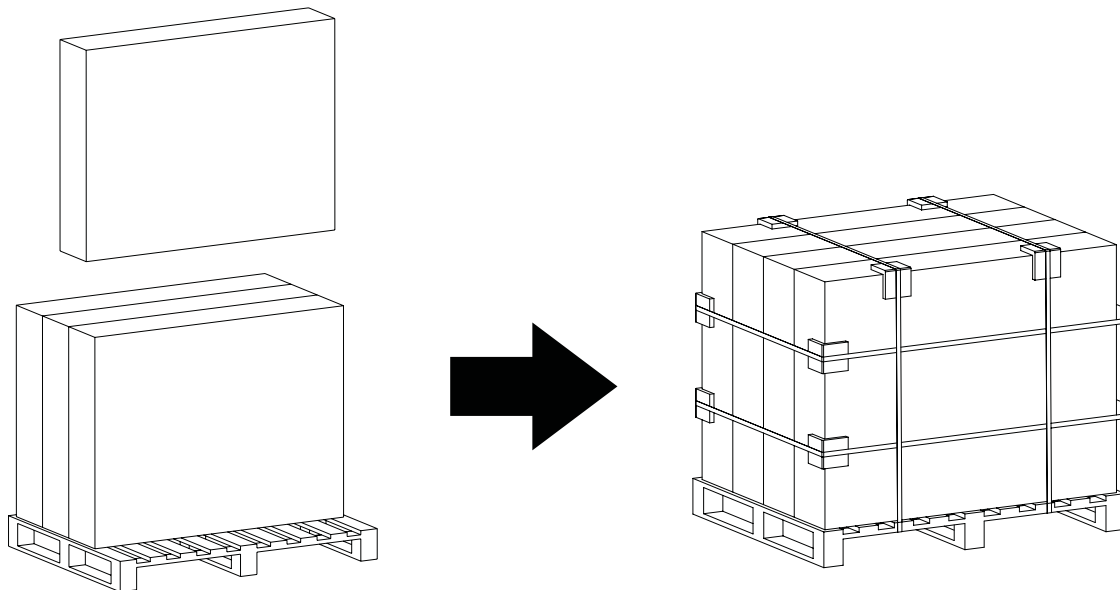


Image 2-2

The weight

SF-10V 1 tile	79.5 kg	R9004843
SF-10V 4 packed tiles (including pallet)	355 kg	R9004843B4

2.2 Stacking SF-10V packages

Stacking possibilities for SF-10V packages

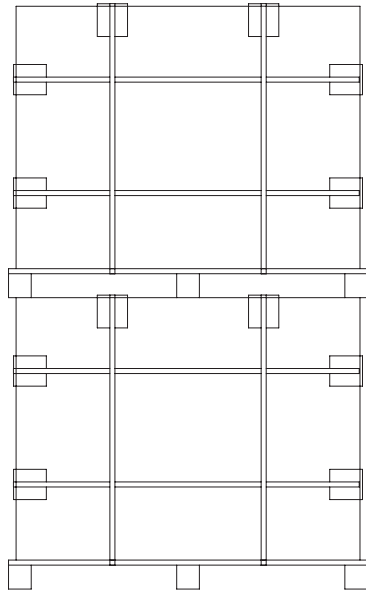


Image 2-3



WARNING: Only the configurations illustrated above can be used for stacking. Other configurations will damage the SF-10V tiles.

3. INSTALLATION REQUIREMENTS

About this chapter

This chapter enumerates the mechanical requirements for the SF-10V display, the electrical requirements to power up the SF-10V display and the system requirements to run the control software efficiently.

Overview

- Mechanical requirements for the SF-10V display
- Electrical requirements for the SF-10V display
- System requirements for the Control software

3.1 Mechanical requirements for the SF-10V display

Support structure

The support structure can be provided and installed by the customer because they vary from system to system. Although, the following must be taken into account and must be precisely calculated on individual basis:

1. **Weight tolerances** : Ensure that the support structure and the floor on which or the wall against which the support structure has to be installed, is able to handle the complete weight of the SF-10V display.
2. **Environmental conditions** : Humidity, wind, temperatures, rain, salty etc.
3. **Location** : Outdoor, altitude, etc.
4. **Ground stability**
5. **Front clearances** : For optimal impact ensure that there is sufficient free area in front of the SF-10V display and respect the maximum viewing distance.
6. **Local regulations regarding such installations**



WARNING: Never construct a SF-10V display if there is uncertainty regarding the stability of an installation or the load holding capabilities. If there are doubts on a systems viability, consult Barco for advice on professional rigging organizations.

Individual basis

Support structures must be assessed on an individual basis. Never construct a wall if there is uncertainty regarding the stability of an installation or the load holding capabilities. If there are doubts on a system's viability, consult Barco for advise on professional rigging organizations.

Example of a support structure

The support structure below consists of vertical I beams, when installed the tiles the bottom row tiles will directly stand on the support structure. The mounting plates located in the back of the support structure when mounting SF-10V tiles.

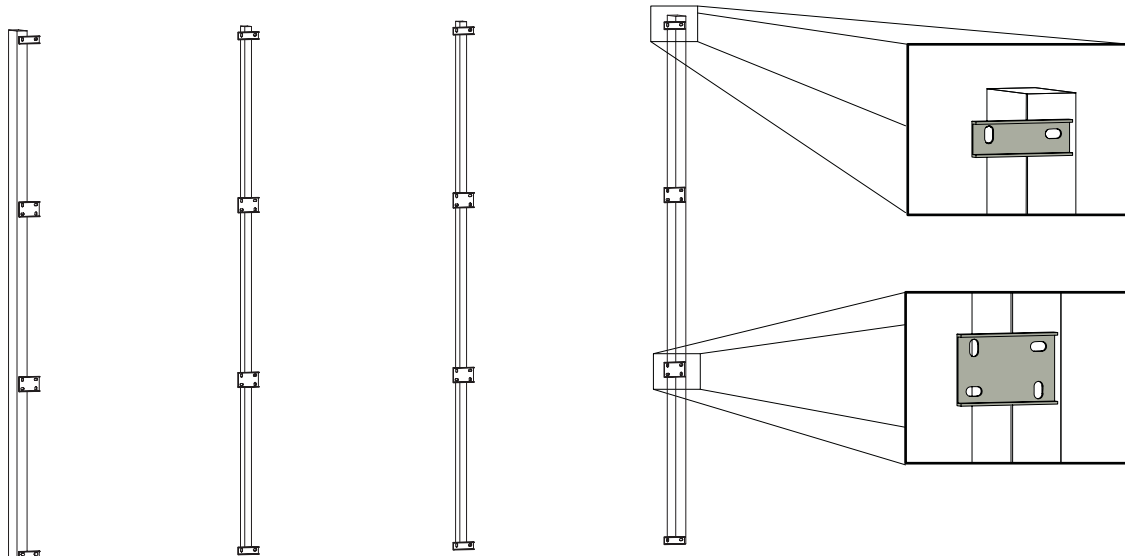


Image 3-1



The drawing only shows the mounting plates' location without the tiles, in fact the mounting plates are not pre-installed on the support structure.



The support structure in the above example is pure illustrative for a SF-10V display consisting of 9 tiles.



It's recommended to integrate a service platform in every other two row of the support structure . Such a platform allows a fast and easy intervention, if required.



WARNING: 90% energy is transferred into heat, which requires a certain amount of airflow at the rear of the SF-10V display. For that sufficient free space should be available behind the display to ensure a good ventilation. The higher the display the more free space is required.

3.2 Electrical requirements for the SF-10V display

Power requirements

One SF-10V tile requires 220-240 VAC, 50-60 Hz, 5.72 amps at 230 VAC. Note that one SF-10V tile correspond with a display surface of 1,23 m². Power link cables are used to link the power from tile to tile. However, MAXIMUM two (2) tiles, may be connected in parallel. So, one power source cable has to be provided per two (2) tiles. Every power source cable should be protected by a circuit breaker or fuses rated 16 A / 250 VAC (15 A / 250 VAC in the USA and Canada).



Barco provides a range of power boxes, which meet the requirements of your SF-10V display. Contact Barco for more information about power boxes and power requirements for your SF-10V display.

Power system

It is recommended to use a TN-S power distribution system (a power distribution system with a separate neutral and grounding conductor) in order to avoid large ground current loops due to voltage differences in the neutral conductor. The total electrical installation should be protected by an appropriately rated disconnect switch, circuit breakers, over voltage protector and Ground Fault Current Interrupters. The installation shall be done according to the local electrical installation codes. In Europe special attention should be given to EN 60364, the standard for electrical installation of buildings. In Germany VDE 0100 should be adhered to. In America, special attention should be given to the National Electrical Code, ANSI/NFPA 70.

This equipment **MUST** be earthed

In order to protect against risk of electric shock, the installation should be properly grounded. Defeating the purpose of the grounding type plug will expose you to the risk of electric shock.

3.3 System requirements for the Control software

Before you begin

It is assumed you are familiar with the Windows operating system at your site.

The CD-ROM in your package contains a Windows-based installation program. You can install the software from the CD-ROM.

System requirements

Minimum specifications :

- Hardware
 - PC Pentium III or equivalent, 2 GHz
 - 512 Mb RAM
 - Free hard disk space: 300 Mb
 - XGA resolution (1024 x 768)
 - Serial communication port
 - Ethernet connection
- Software
 - Windows 7 and Windows Vista.

Recommended specifications :

- Hardware
 - PC Pentium IV or equivalent, 2.4 GHz
 - 1 Gb RAM
 - 300 Mb hard disk free space
 - SXGA resolution (1280 x 1024) with 32 Mb video memory
 - Serial communication port
 - Ethernet connection
- Software
 - Windows XP Professional, Windows Vista or Windows 7



The system should be compatibility with either DTS or RMS.



The DTS and RMS can not compatibility with Windows Vista.



The DTS and RMS can compatibility with Windows 7 and Windows XP.

3. *Installation requirements*

4. SYSTEM OVERVIEW

About this chapter

This chapter enumerates the fundamental elements of an SF-10V screen display.

Overview

- Introduction
- SF-10V tile
- Power boxes
- Video Processor
- Control software
- Fiberlink system

4.1 Introduction

The fundamental elements of an SF-10V screen display system are:

- SF-10V tiles.
- Control PC.
- LED Image Processor.
- Power box.
- Control software.

Block diagram of a SF-10V display

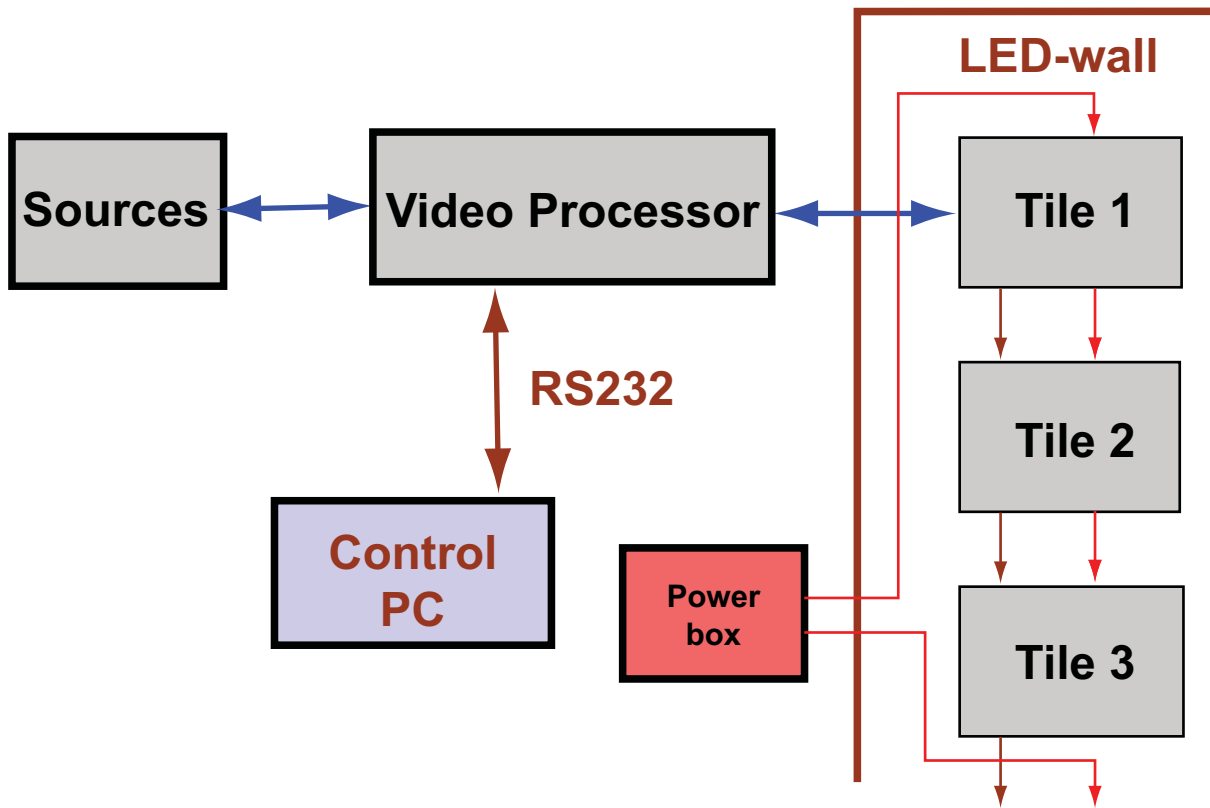


Image 4-1



If the LED Image Processor is D320 or Ledpro use the RS232 connection with the control PC

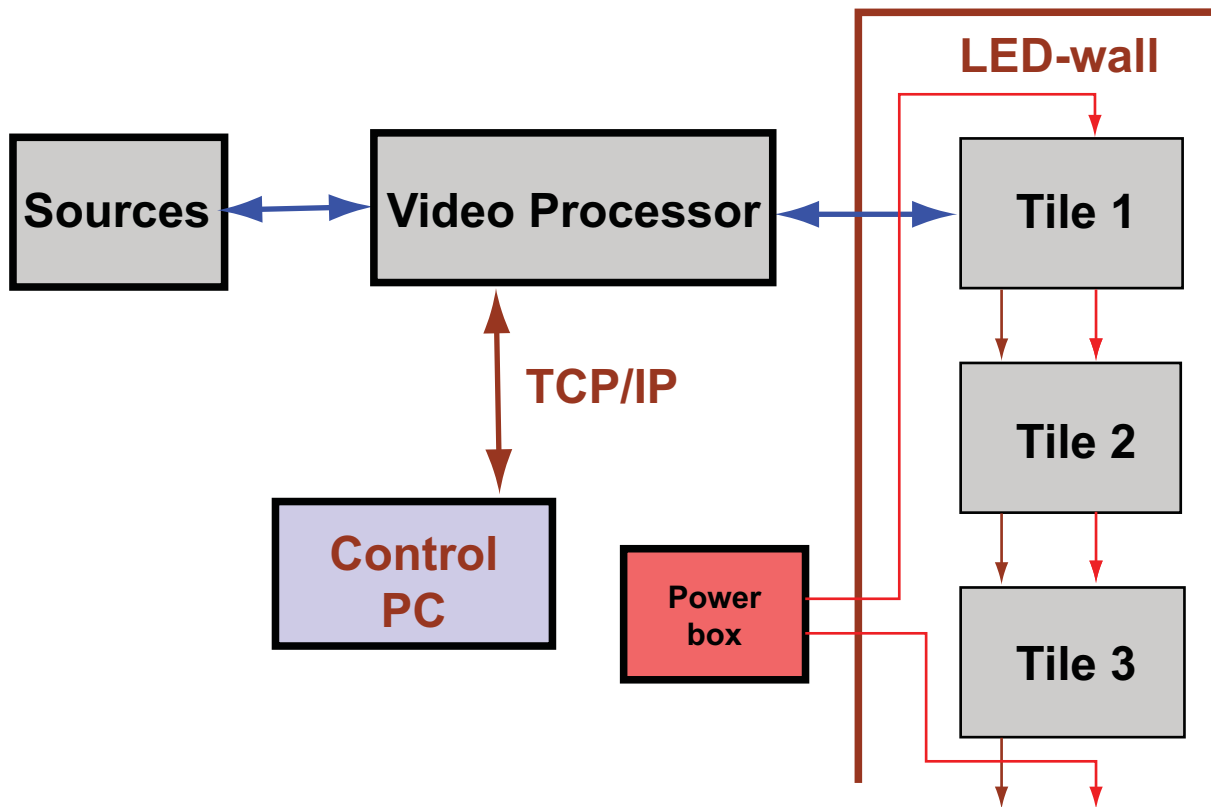


Image 4-2



If the LED Image Processor is DX-700 and DX-100 use the TCP/IP connection with the control PC.

4.2 SF-10V tile

Introduction SF-10V tile

The SF-10V series is designed for ultra-large outdoor LED display installations. The SF-10V tile can overlay video and data sources in their native quality. A unique video processing feature enables the creation of a visual resolution quasi double the physical resolution defined by the cluster of LED's spread on the surface of the display. The SF-10V tile is an IP65 rating in front of side and an IP43 rating in back of side.

Parts location of the SF-10V tile

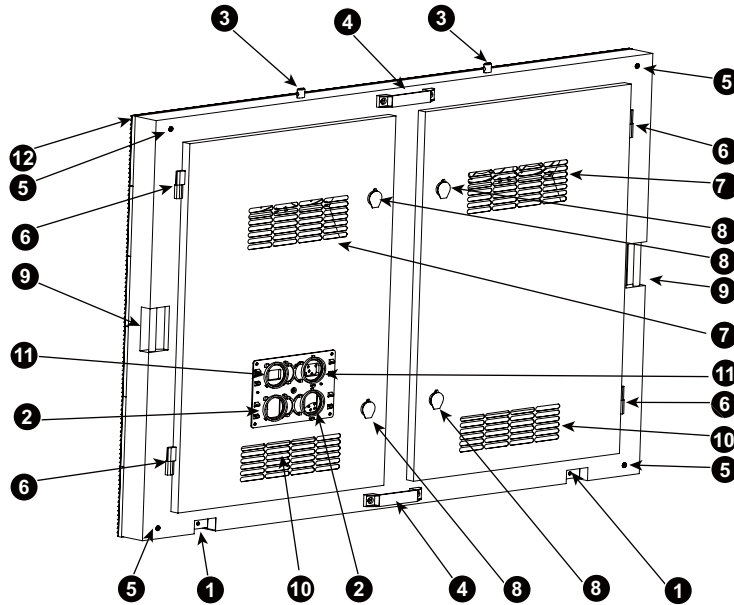


Image 4-3

1. Hoist point.
2. Handle.
3. Air outlet.
4. Hoist point.
5. Insert nuts for fixing tile.
6. Hinge
7. Lock.
8. Lock
9. Hidden handle
10. Hinge.
11. Air inlet
12. Insert nuts for fixing tile.
13. Adjust block.
14. Lock.
15. Lock.
16. Handle.
17. Resyncer.
18. Air inlet.
19. Adjust block.
20. Insert nuts for fixing tile.
21. Hinge.
22. Hidden handle.
23. Air outlet.
24. Hinge.
25. Insert nuts for fixing tile.

Power cables used between SF-10V tiles

To meet the demands of each SF-10V application Barco offers several lengths of power cables to link power from tile to tile. Note that the power output port of the last tile in the power chain has to be sealed with a waterproof cap.



Image 4-4
Power link cable of 1,5 meter (R9850241).



Image 4-5
Dummy power plug (R9850280).

Data cables used between SF-10V tiles

To meet the demands of each SF-10V application Barco offers several lengths of data cables to link data from tile to tile. Note that the data output port of the last SF-10V tile in the data chain has to be sealed with a dummy data plug.



Image 4-6
Data linking cable of 1,5 meter (R9850210).



Image 4-7
Dummy data plug (R9850270).

4.3 Power boxes

General

To ensure safe and reliable operation of the SF-10V display, a suitable system for AC power distribution must be used. Though 3rd party solutions may be used, several sizes and types of power distributions are available from Barco. For smaller system the "Mono Phase Power Box" can be used, medium sized system may use on of several custom power box solutions.



Image 4-8
Mono phase power box.



Image 4-9
Custom power box.



CAUTION: Consult the manual(s) of the used power box for more information about installation and usage guidelines.

4.4 Video Processor

General

The Video processor processes (image processing, conversion and conditioning) all source signals for digital distribution to every tile as well as providing a user interface for complete system setup monitoring and control. The video processor can be accessed directly or via the control software (e.g. DTS). This software is designed as a user interface to be used in conjunction with the Video processor and display. It should be used on a PC that's connected to the Video processor through a serial RS232 connection.

SF-10V: Video Processor Overview



Image 4-10
D320 Processor.



Image 4-11
DX-700 Processor.



Image 4-12
LEDPro Processor.



CAUTION: Refer to the manual(s) of the used video processor for more information about installation and usage guidelines.

D320

The D320L is a video processing device, designed to drive as well Barco LED walls as large screen projectors, monitors, plasma screens, ... etc. The D320L is capable of handling all standard output formats like SVGA, XGA, SXGA and UXGA on an analog RGBHV and digital DVI output. The D320L digitizer allows you to control up to 4 sources on one display. Seamless switch from source to source or display sources together, overlay them, customize them. With analog and digital outputs which allow for the control of displays, as well as built-in-control software, the D320L gives you control over everything from basic set-up to configuration and advanced feature control. The D320L digitizer is a generic device. This means that a number of combinations can be made. Devices can be chained in order to generate more windows on the output (4 windows per device). Devices can also be stacked in order to be able to split generated output of the devices to multiple screens. For latter purpose, each input is equipped with an active loop through.

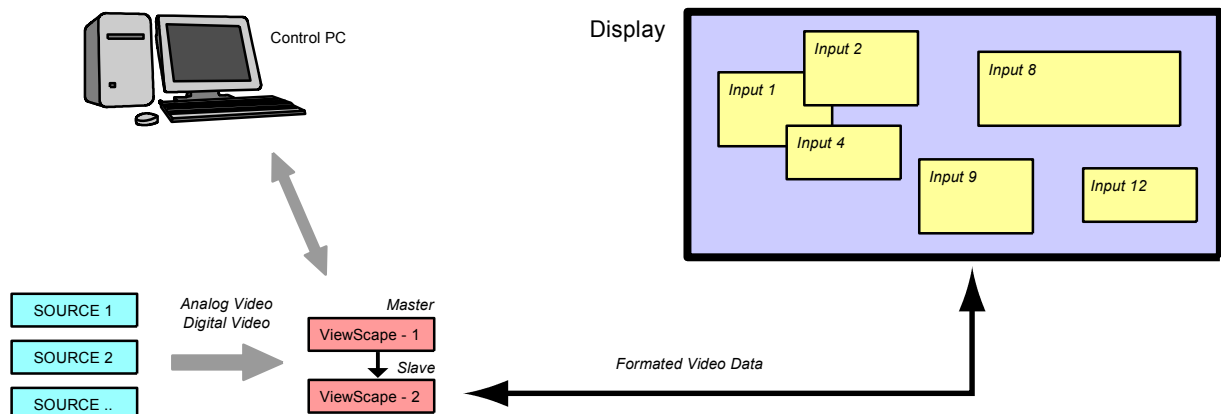


Image 4-13

DX-700 and DX-100

The DX-700 and DX-100 is a multi-window video processor designed for use as a versatile front-end to all Barco LED products.

Image processing, LED wall configuration and control functions are adjusted from the DX-700 front panel, or from Barco's Director Toolset.

LedPro

The LED-PRO is a powerful all-in-one signal processor that accepts a wide range of video input signals, and processes them to drive Barco LED displays. The LED-PRO allows you to scale visual sources and mix them in multiple ways while still maintaining superb picture quality. LED-PRO is the ideal solution for converting RGB, HDTV, component, S-video, composite (NTSC, PAL and SECAM), SDI, DVI, and HDSDI for use with Barco LED walls. LED-PRO has an advanced feature set that includes universal inputs, aspect ratio conversion, memory presets, test patterns, source lock, picture adjustments, motion adaptive de-interlacing, and 3:2 and 2:2 pull down detection.

4.5 Control software

General

The control software is designed as a graphic user interface (GUI) and can be used to control and configure the digitizer as well as the Barco LED wall via a PC (e.g. Director toolset).

Minimum required software version: 2.04



Image 4-14
Control software "Director toolset".

Remote management software (RMS)

The RMS-1 software is designed to configure, manage, and monitor Barco digital signage LED display systems. It supports D320L/Lite, DMP-100 and DX-700 video processors as well as SF-10V LED tiles.

The RMS software also has a dedicated user interface which can be installed on any windows based PC for remote access the LED display system.



Image 4-15



CAUTION: Refer to the manual(s) of the used control software for more information about installation and usage guidelines.

4.6 Fiberlink system

General

If the distance between the digitizer and the LED-wall exceeds 5 meters, a fiber optic connection must be used to ensure signal integrity and system reliability. Barco offers two complete system solutions including transmitter, fiber and receiver. The choice of system depends on the length of cable required.

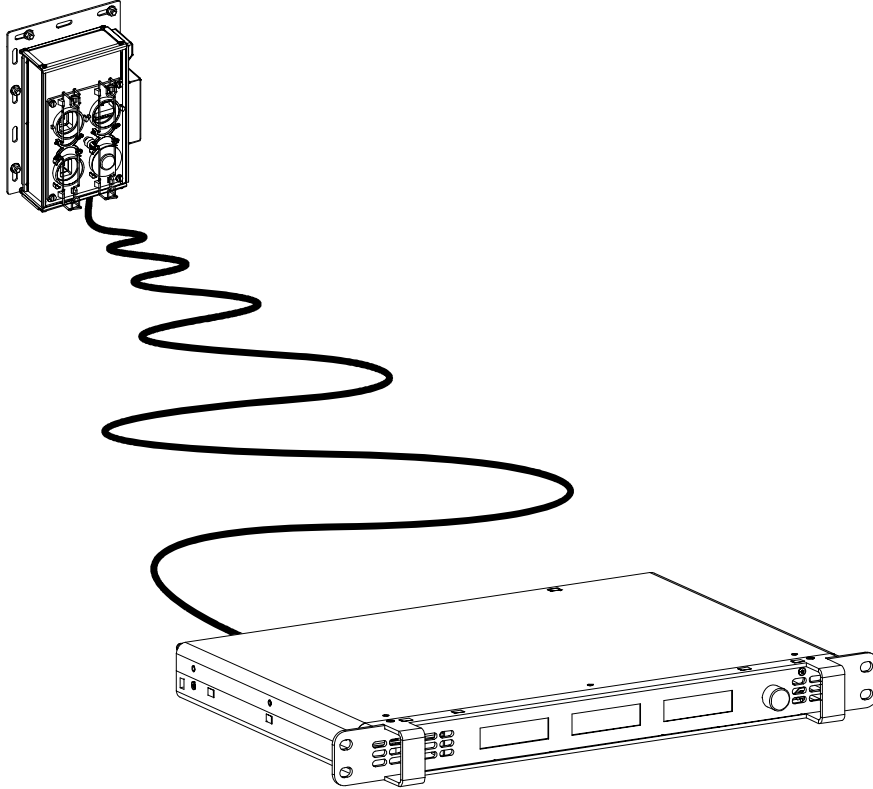


Image 4-16
"Fiberlink 2" transmitter and receiver.



CAUTION: Refer to the manual(s) of the used fiberlink system for more information about installation and usage guidelines.

5. PHYSICAL INSTALLATION

About this chapter

The setup process below describes roughly the installation stages to follow to install a SF-10V display. Several stages refer to one or more detailed and illustrated procedures which are also described in this installation manual.



WARNING: Safety first. Fence off the installation area before starting to install your SF-10V display. Ensure you read, understand and follow all safety instructions mentioned in the chapter "Safety", page 3 of this installation manual. Furthermore, make sure that all installation requirements for your SF-10V display are fulfilled, see chapter "3. Installation requirements", "Installation requirements", page 11.

Overview

- Installation of the support structure
- Mounting the SF-10V tile

5.1 Installation of the support structure

What has to be done?

The complete support structure has to be assembled and installed in its final position.



Screen supporting/securing structures vary from system to system. Consult Barco for advise on professional rigging organizations.

SF-10V mounting plates.

Barco provides mounting plates for the SF-10V tiles which can be used to clamping the tiles to the support structure.

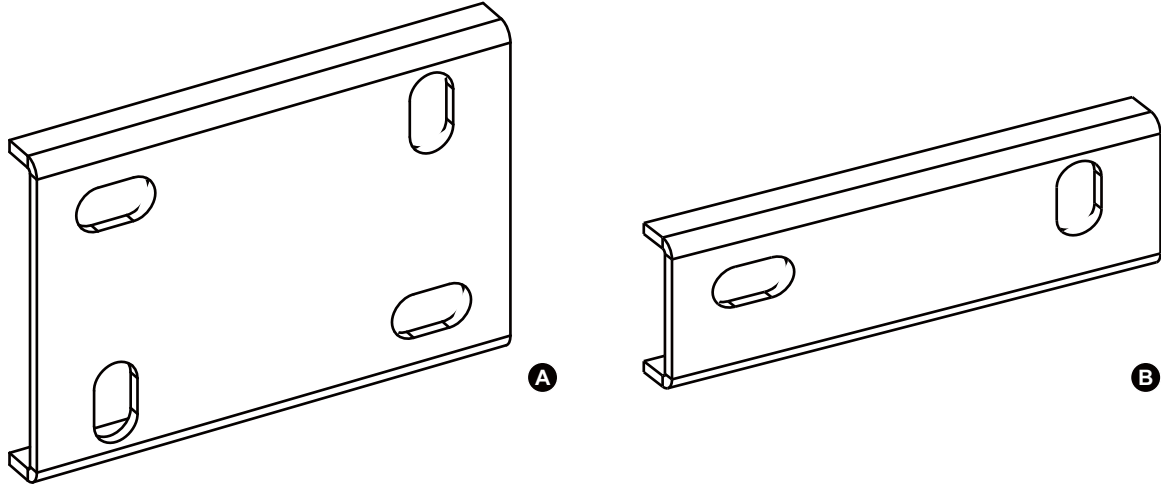


Image 5-1

- A Middle mounting plate.
- B Top / Bottom mounting plate.

5.2 Mounting the SF-10V tile

Necessary tools

- 17 mm open-end wrench.
- 17 mm box-end wrench.
- 14 mm long allen key.
- Scaffold or Z-lift.

Necessary parts

- SF-10V tiles
- Four M10x90 bolts per tile (DIN931 hex cap bolts and partially thread - steel zinc plated). Reference A.
- Four M10 plain washer per tile (DIN433 - steel zinc plated). Reference B.

What has to be done?

The SF-10V tiles have to be mounted onto the support structure.

Take out the SF-10V tiles from the package.

Take out the necessary tiles from their package just before assembling them onto the support structure.

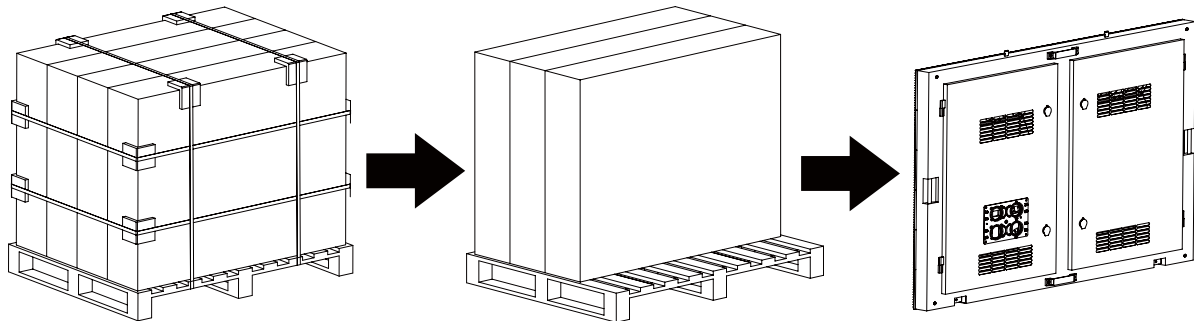


Image 5-2



CAUTION: The following procedure must be performed by minimum three authorized and qualified technical persons, which are thoroughly familiar with the product and all of the proper safety checks of this product. To do otherwise increases the risk of hazard and injury to the user.

SF-10V tile mounting sequence

Build up the SF-10V display row by row from bottom to top. Always start in the middle of the row and complete the row by placing the SF-10V tiles beside one another from the middle of the row to the sides.

How to mount a SF-10V tile?

1. Bring the SF-10V tile in front of its final position on the LED-wall. Ensure the tile is in the right position, so with the hoist point on top.

5. Physical installation

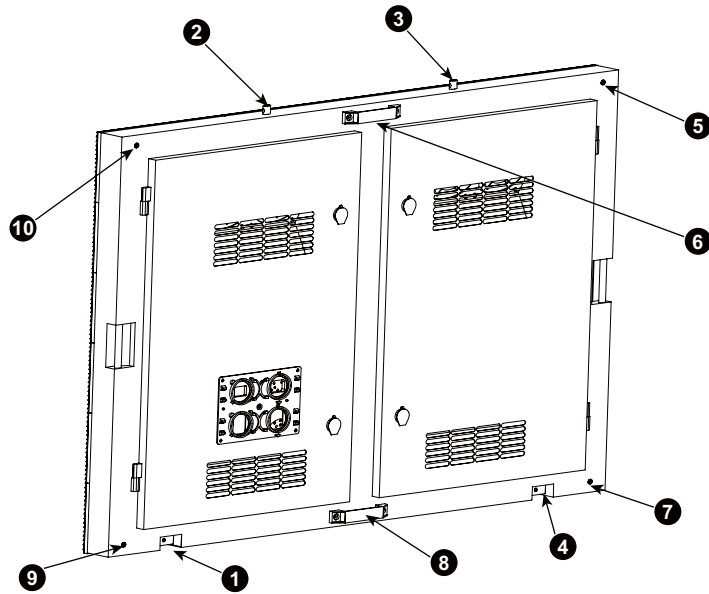


Image 5-3

1. Adjust block
2. Hoist point.
3. Hoist point.
4. Adjust block
5. Insert nuts for fixing tile
6. Handle
7. Insert nuts for fixing tile
8. Handle
9. Insert nuts for fixing tile
10. Insert nuts for fixing tile

2. Insert the M10 plain washer (Reference B) into the bolt (Reference A)

3. Insert the bolts into the corresponding holes of the mounting plates and let the mounting plate attach to the support structure.
Caution: Two persons are required at the front of the LED-display to perform this action. Both hands must be free to insert a tile in a LED-wall. Therefore the use of a ladder to insert a tile is forbidden. Only a solid scaffold or a Z-lift is allowed.

Tip: Use the hoist point hole on the top side to lift the SF-10V tile, using a crane and the hoist system to the desired height. This hoist point has two functions, not only can lift the tile and also can locate the two tiles when install the display.

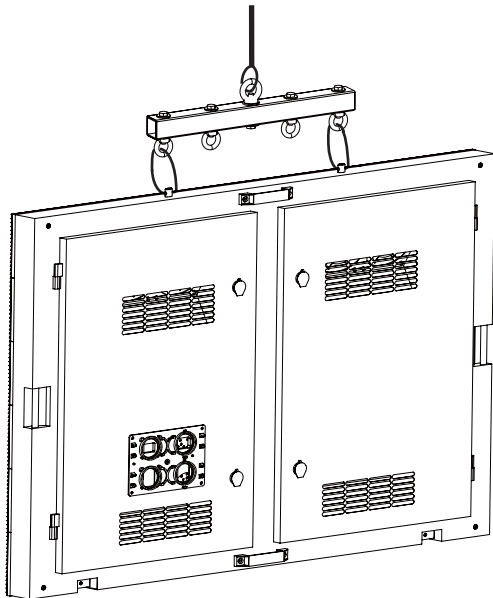


Image 5-4

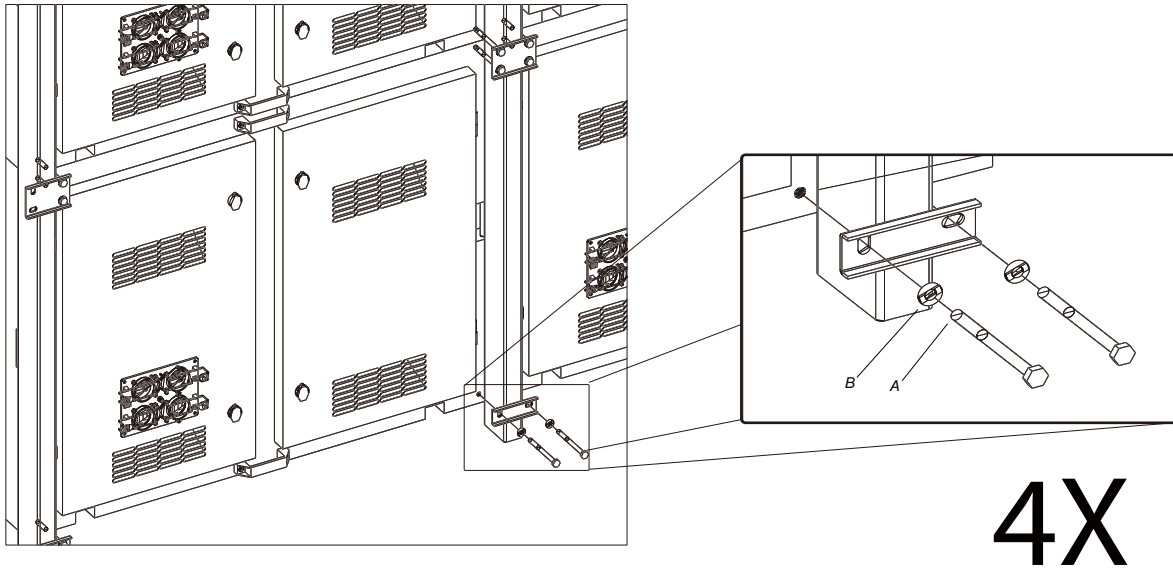


Image 5-5

4. Place a prevailing torque for the bolt (reference A) with the washer (reference B) on each insert nuts of tiles. Do not fasten yet.
5. Level out the SF-10V tile. Use the adjust block in the bottom of tile for the height alignment;
Tip: For maximum adjustment space in horizontal direction place the hex cap bolts of the every first SF-10V tile that is placed on the mounting plate in the middle of the corresponding slots.
6. Fasten the SF-10V tile. At least one person at the front keeps the SF-10V tile steady until the tile is completely fasten.
7. Release the adjust block.

Example of SF-10V tile mounting

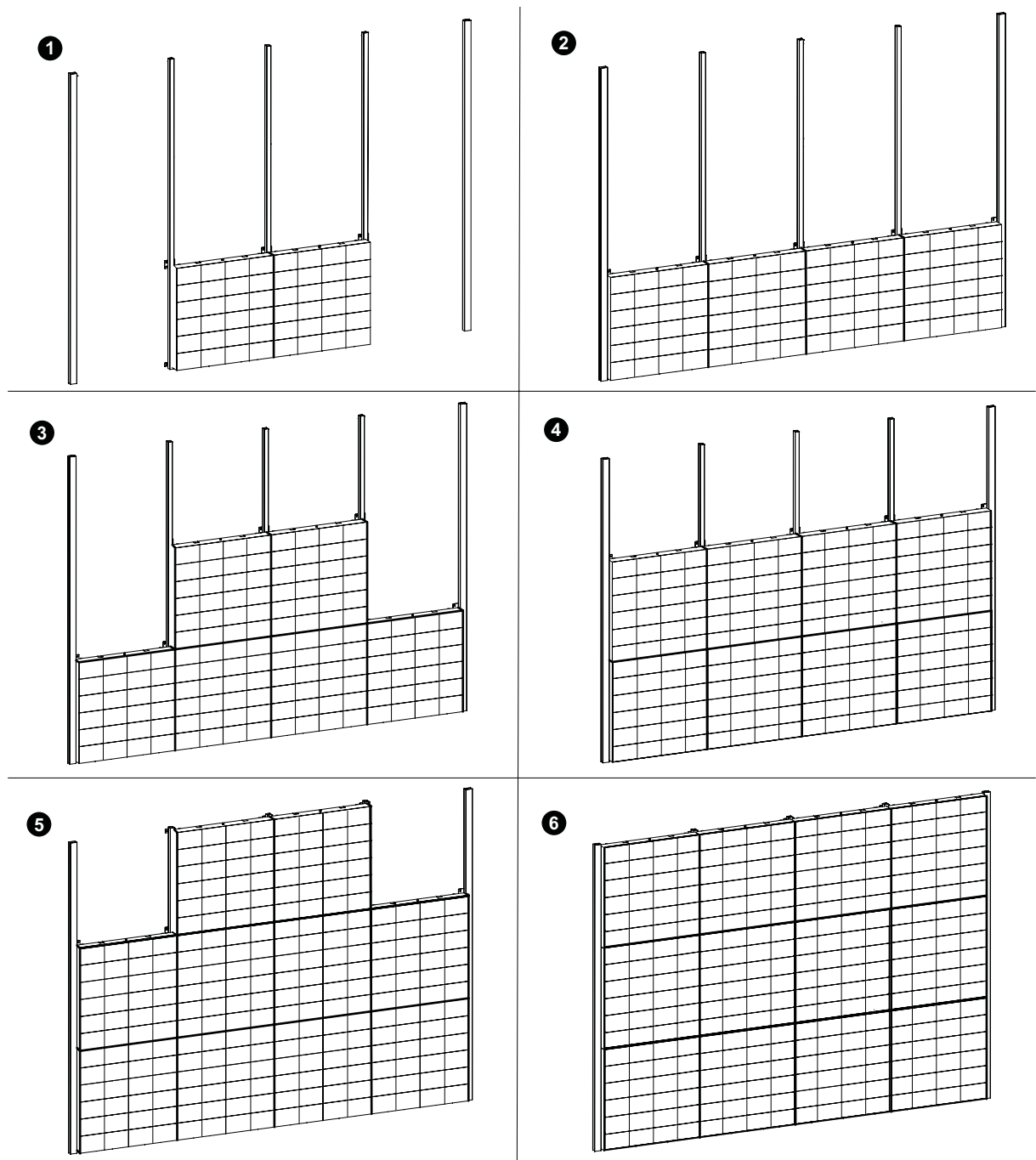


Image 5-6

How to get the height alignment between tiles

Open the back door, using the long allen key rotate the socket head screw that located the bottom of tile as illustrated. If the allen key clockwise rotate the adjust block will go up, if rotate counter-clockwise the adjust block will go down.

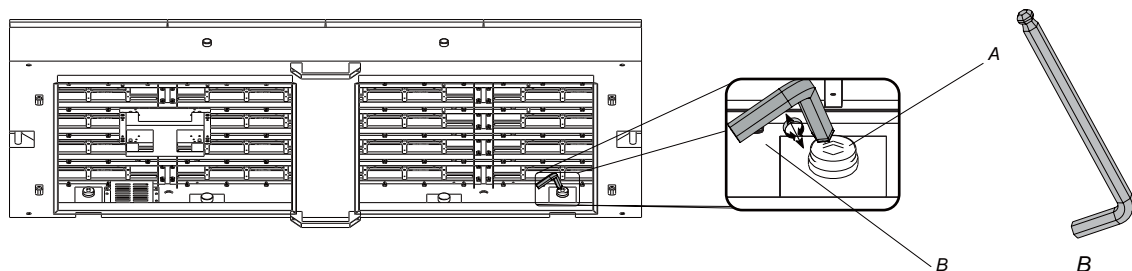


Image 5-7

- A Adjust block screw.
- B Long allen key(14mm)

About cabling of Data cable between tiles.

Considering the position of the data in/out sockets in SF-10Vtiles and datal cable length, the cabling ways illustrated as follows are the only 2 possible ways. That is, the data cable must go into the SF-10Vdisplay from the left side (back view), connect all the tiles in a column from upper or lower corner, and then connect the next column from the other corner, repeat this from left to right (back view) until all tiles are connected.

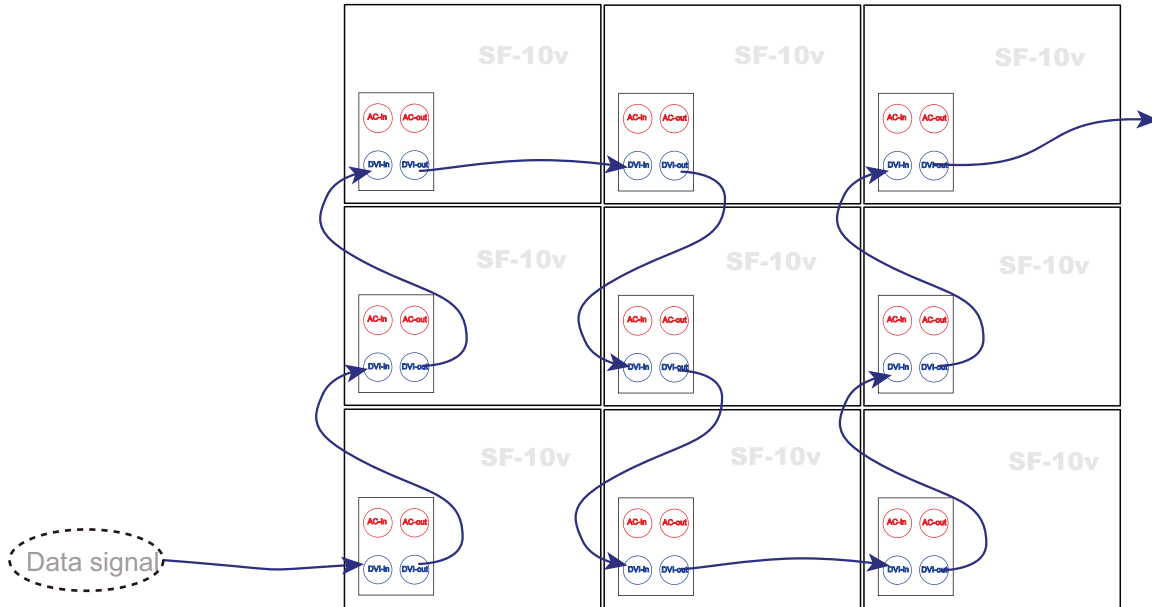


Image 5-8

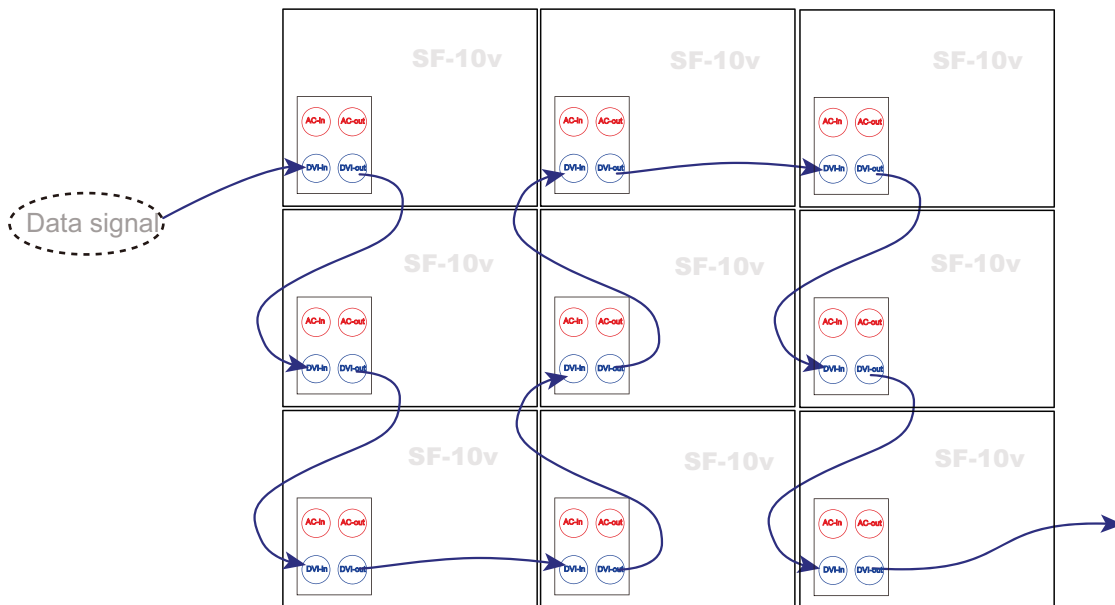


Image 5-9

6. DIMENSIONS

About this chapter

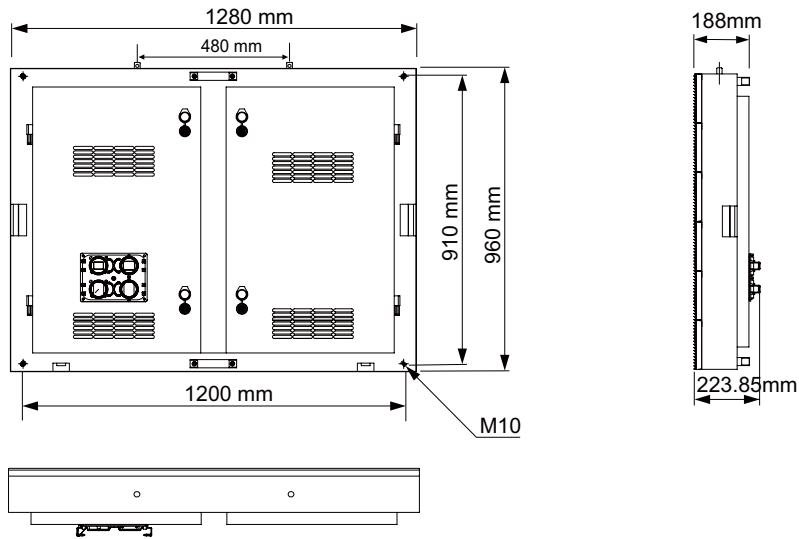
This chapter contains drawings of the SF-10V tiles and its package, with the most important dimensions.

Overview

- SF-10V tile
- Assembly of SF-10V tiles
- SF-10V package

6.1 SF-10V tile

Dimensions of the SF-10V tile



6.2 Assembly of SF-10V tiles

Main dimensions of an assembly of SF-10V tiles

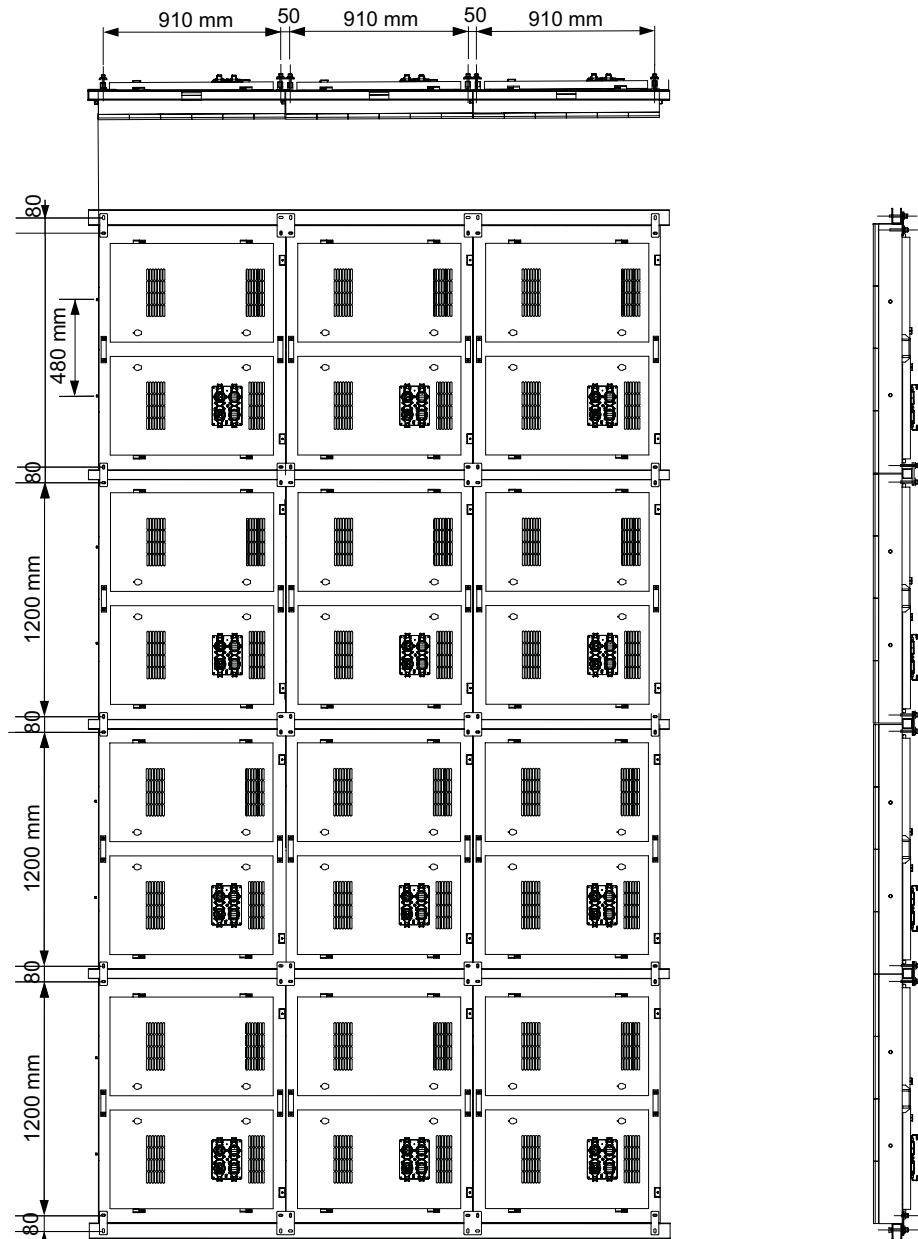


Image 6-2

6.3 SF-10V package

Dimensions of the SF-10V tile package containing 4 tiles.

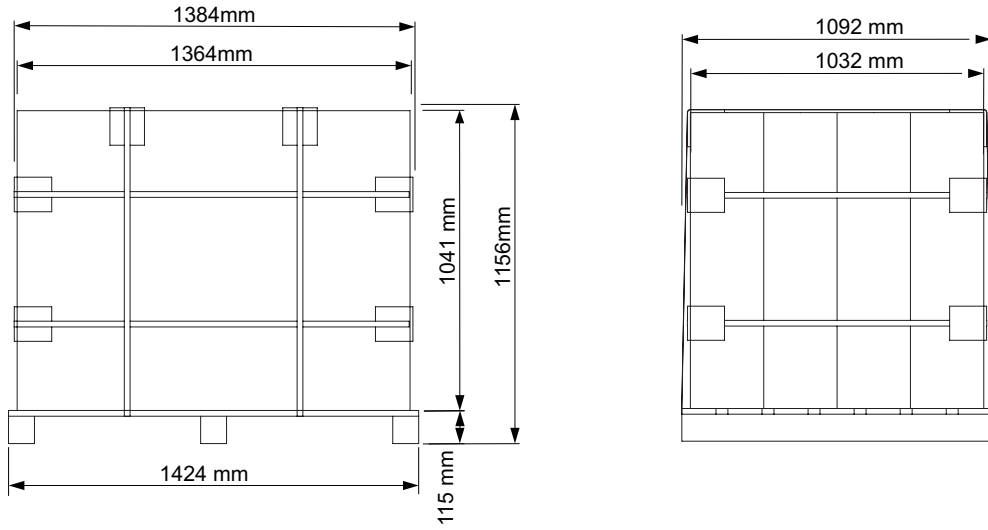


Image 6-3

7. SPECIFICATION

7.1 Specifications of the SF-10V tile

Specifications of the SF-10V tile

Pixel Pitch	20mm
LED configuration	2R, 1G, 1B
Pixel Density (real mode)	2,500 px/m ²
Pixel Density (virtual mode)	10,000 px/m ²
LED density	10,000 LEDs/m ²
Pixel per module HxV (real mode)	64x48
Pixel per module HxV (virtual mode)	128x96
Contrast ratio	2,000:1
Minimum Brightness	6,840 NIT
Typical Brightness	7,200–9,800 NIT
Color Processing	14 bit/color
Colors	4.4 trillion
Dimming	8 bit
Refresh Rate (real mode)	1,600 Hz
Refresh Rate (virtual mode)	1,000 Hz
Horizontal Viewing Angle (color shift)	-75°/+75°
Horizontal Viewing Angle (50% brightness)	-55°/+55°
Vertical Viewing Angle (color shift)	-40°/+30°
Vertical Viewing Angle (50% brightness)	-23°/+20°
Max Power consumption	1,027 W/m ²
Typical Power consumption	151 W/m ²
Operation Power Voltage and frequency	110-240V 50-60Hz
LED Lifetime	60,000
Environmental	
Working Temperature	-20°C/+50°C (-4°F to 122°F)
Tile total resolution (real/virtual)	3072/12288 px/tile
Total resolution (real/virtual)	2500/10000 px/sqm
Operational Humidity	10–99%
Storage Temperature	10–99%
Ruggedness (IP rating, Front/Back)	IP65/IP43
Sea Worthiness (IEC 60068-2-52)	Sev. 2
Dimensions (HxWxD)	960x1280x220 mm 37.8x50.4x7.6 inch
Module surface	1.23 m ² 13.24 ft ²
Weight	64.7 kg/m ² 43.5 lbs/m ² 79.5 kg/tile
Installation Access	back
Service Access(front/back)	back

7. Specification

Compatibility	
D320L/Lite	Yes
LedPro	Yes
DX-700	Yes
DMP-100	No
AEC-4000 (in combination with DTS)	Yes
AEC-4000 (in combination with RMS)	No
Fiberlink II	Yes
CAT5 Link	Yes
DTS Software	Yes
RMS Software	No
XVS	Yes
Certifications	CE/RohS/ETL

8. ORDER INFO

About this chapter

This chapter contains the order numbers of several important SF-10V peripherals.

Overview

- Order info
- Spare part and service kits



Consult the secured partner zone on WWW.My_barco.com for an updated list with order numbers of the available SF-10V products.

8.1 Order info

List with order numbers for SF-10V products

Order info	Description
R9004843B1	BME SF-10V 1TL BOX
R9852560	BME P SLITE HOIST KIT
R9852350	BME P SLITE RAIL KIT 896
R9850241	Power link cable of 1.5 meter.
R9850250	Power link cable of 4.5 meter.
R9850260	Power link cable of 9 meter.
R9850280	Five dummy power plugs (for power output sockets)
R9850210	Data link cable of 1.5 meter
R9850220	Data link cable of 5 meter
R9850270	Two dummy data plugs (for data output sockets)
R9870092	BME CATLINK DVI-MDR 10M
R9870093	BME CATLINK MDR-MDR 50M
R9870094	BME CATLINK MDR-MDR 10M
R9870095	BME CATLINK DVI-MDR 50M
R9828833	BME DMP-100 DIG MED PROCESSOR
R98522780	BME DX-700 BASE UNIT
R98522781	BME DX-700 INPUT MODULE
R98522782	BME DX-700 DVI OUTPUT MODULE
R9004640	BME DX-100
R9851570	BME D320L
R9851560	BME D320 LITE
R9850960	BME D320 INP DVI
R9853130	BME P (HD) SDI IN D320/XLM
R9853350	BME FIBERLINK II BASE UNIT
R9853360	BME FIBERL II RX S-MODE
R9853370	BME FIBERL II TX INP S-M
R9853371	BME FIBERLINK II TX INPUT M-M
R9853361	BME FIBERLINK II RX M-MODE
R9851260	POWER VEAM CABLE 10M
R9851261	POWER VEAM CABLE 20M
R9851262	POWER VEAM CABLE 30M
R9851263	POWER VEAM CABLE 50M
R9851250	POWER BOX 3 PHASE 380V 2 OUTPUT
R9851251	POWER BOX 3 PHASE 380V 3 OUTPUT
R9851252	POWER BOX 3 PHASE 380V 4 OUTPUT

R9851253	POWER BOX 3 PHASE 380V 5 OUTPUT
R9851254	POWER BOX 3 PHASE 380V 6 OUTPUT
R9850058	BME DLITE PWR BOX220
R838621	BME SF Middle Mounting Plate
R838622	BME SF Side Mounting Plate

8.2 Spare part and service kits

General

Barco provides several kits for servicing SF-10V tiles. Below you find an order list of existing spare part and service kits. In the future new kits can be added to this list. Contact Barco to get an updated list.

Order info	Description
R9870040	BME K SF-10V LED Frame Kit
R9870043	BME K SF-10V Shader Kit
R9870049	BME K SF Series Fan Kit
R9870050	BME K SF Series Power Supplier
R9870052	BME K SF-10V Data Cable Kit
R9870055	BME K SF-10V Power Cable Kit
R9870057	BME K SF Series tooling Kit
R765866K	BME K SF-10 Ctr Board Kit
R765938K	BME K TF-10 I/O Box Kit

9. ENVIRONMENTAL INFORMATION

Overview

- Disposal information
- Rohs compliance

9.1 Disposal information

Disposal Information

Waste Electrical and Electronic Equipment



■ This symbol on the product indicates that, under the European Directive 2002/96/EC governing waste from electrical and electronic equipment, this product must not be disposed of with other municipal waste. Please dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

For more information about recycling of this product, please contact your local city office or your municipal waste disposal service. For details, please visit the Barco website at: <http://www.barco.com/en/AboutBarco/weee>

Disposal of batteries in the product



This product contains batteries covered by the Directive 2006/66/EC which must be collected and disposed of separately from municipal waste.

If the battery contains more than the specified values of lead (Pb), mercury (Hg) or cadmium (Cd), these chemical symbols will appear below the crossed-out wheeled bin symbol.

By participating in separate collection of batteries, you will help to ensure proper disposal and to prevent potential negative effects on the environment and human health.

9.2 Rohs compliance

Turkey RoHS compliance



■■■■ Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur.

[Republic of Turkey: In conformity with the EEE Regulation]

中国大陆 RoHS (Information for China ROHS compliance)

根据中国大陆《电子信息产品污染控制管理办法》(也称为中国大陆RoHS),

以下部分列出了Barco产品中可能包含的有毒和/或有害物质的名称和含量。中国大陆RoHS指令包含在中国信息产业部MCV标准：“电子信息产品中有毒物质的限量要求”中。

According to the “China Administration on Control of Pollution Caused by Electronic Information Products” (Also called RoHS of Chinese Mainland), the table below lists the names and contents of toxic and/or hazardous substances that Barco’s product may contain. The RoHS of Chinese Mainland is included in the MCV standard of the Ministry of Information Industry of China, in the section “Limit Requirements of toxic substances in Electronic Information Products”.

Table of toxic and hazardous substances/elements and their content, as required by China’s management methods for controlling pollution by electronic information products

零件项目(名称) Component Name	有毒有害物质或元素 Hazardous Substances or Elements					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印制电路配件 Printed Circuit Assemblies	X	O	O	O	O	O
风扇 Fan	O	O	O	O	O	O
外接电(线)缆 External Cables	O	O	O	O	O	O
内部线路 Internal wiring	O	O	O	O	O	O
电源供应器 Power Supply Unit	O	O	O	O	O	O
金属外壳 Metal Enclosure	O	O	O	O	O	O
塑胶外壳 Plastic Enclosure	O	O	O	O	O	O
螺帽,螺钉(栓),螺旋(钉),垫圈,紧固件 Nuts, bolts, screws, washers, fasteners	O	O	O	O	O	O
文件说明书 Paper Manual	O	O	O	O	O	O
光盘说明书 CD Manual	O	O	O	O	O	O

O : 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。

9. Environmental information

O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.

X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求。

X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363 2006.

在中国大陆销售的相应电子信息产品(EIP)都必须遵照中国大陆《电子信息产品污染控制标识要求》标准贴上环保使用期限(EFUP)标签。Barco产品所采用的EFUP标签(请参阅实例,徽标内部的编号用于制定产品)基于中国大陆的《电子信息产品环保使用期限通则》标准。

All Electronic Information Products (EIP) that are sold within Chinese Mainland must comply with the "Electronic Information Products Pollution Control Labeling Standard" of Chinese Mainland, marked with the Environmental Friendly Use Period (EFUP) logo. The number inside the EFUP logo that Barco uses (please refer to the photo) is based on the "Standard of Electronic Information Products Environmental Friendly Use Period" of Chinese Mainland.

